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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,096	03/30/2001	Tsutomu Kurose	740250-836	2227
22204	7590	07/27/2005	EXAMINER	
NIXON PEABODY, LLP 401 9TH STREET, NW SUITE 900 WASHINGTON, DC 20004-2128			BURLESON, MICHAEL L	
			ART UNIT	PAPER NUMBER
			2626	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/821,096

Applicant(s)

KUROSE, TSUTOMU

Examiner

Michael Burleson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-4 have been cancelled and new claims 5-16 are pending and are rejected.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-8, 10, 12, 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 5, Applicant recites, "a third step of correcting the result of the second step by changing a non-

halftone pixel which is continuous to the halftone pixel determined at the second step or a halftone pixel previously corrected at the third step and has a density equal to or higher than a threshold density, to a halftone pixel.” Examiner does not understand the third step of claim 5. Examiner interprets the claim as a choice between changing a non-halftone pixel to a halftone pixel or a halftone pixel to a halftone pixel. Also, examiner does not understand how applicant, “corrects a halftone pixel previously corrected in the third step” if the third step consists of methods to correct a non-halftone and a halftone pixel.

3. Regarding claim 6, Applicant recites, “a third step of correcting the result of the second step, including the steps of: setting a reference region having a predetermined size and including at least a non-halftone pixel; counting a number of the halftone pixels determined at the second step and halftone pixels previously corrected at the third step within said reference region...” Examiner does not understand the third step of claim 6. Examiner doesn’t understand how applicant, “counting a number of the halftone pixels determined at the second step and halftone pixels previously corrected at the third step within said reference region...” if the third step consists of methods to correct a non-halftone and a halftone pixel.

4. Regarding claim 7, Applicant recites, “...a halftone pixel previously corrected by the redetermining means and has a density equal to or higher than a threshold density, to a halftone pixel.” Examiner does not understand how a halftone pixel is previously corrected by the redetermining means.

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5. Regarding claim 8, Applicant recites, "...counting a number of the halftone pixels determined by said halftone pixel determining means and halftone pixels previously corrected by said redetermining means within said redetermining means within said reference region..." Examiner does not understand the redetermining means in claim 8. Examiner does not understand, in particular, how a halftone pixel is previously corrected by the redetermining means if the redetermining means is being explained.
6. Claims 10,12,14 and 16 are rejected for depending upon claims 6 and 8.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujiwara US 6775031.
9. Regarding claim 5, As best understood by the claim language, Fujiwara teaches of a edge detector (183) that contains an edge identifying unit (187) that judges an edge segment or a non-edge segment (column 5,lines 59-65 and figure 2), which reads on a first step of determining whether or not each pixel in said image data is an edge pixel.

Fujiwara teaches of a total judgment unit (188) that classifies a target pixel as a character, halftone or flat element based on the results of edge identifying unit (187) and the halftone dot detector (182) (column 5, lines 66-67 – column 6, lines 1-8). The halftone dot detector (182) that identifies a target pixel as belonging to a halftone or non-halftone region based on brightness data which is calculated using a formula (column 4, lines 60-67 and column 5, lines 1-22), which reads on a second step of determining whether each pixel in said image data is a halftone pixel or a non-halftone pixel, according to a predetermined algorithm based on the result on said first step. Fujiwara teaches of a correction unit (15) that has a smoothing filter (151), pass-through circuit (152) and edge enhancing circuit (153), in which the data is corrected, based on the results of the total judgment unit (188) (column 5, lines 66-67 – column 6, lines 13-22). This reads on a third step of correcting the result of the second step by changing a non-halftone pixel which is continuous to the halftone pixel determined at the second step or a halftone pixel previously corrected at the third step and has a density equal to or higher than a threshold density, to a halftone pixel.

10. Regarding claim 7, As best understood by the claim language, Fujiwara teaches of an edge detector (183) that contains an edge identifying unit (187) that judges an edge segment or a non-edge segment (column 5, lines 59-65 and figure 2), which reads on an edge detecting means which detects whether each pixel in said image data is an edge pixel or not. Fujiwara teaches of a total judgment unit (188) that classifies a target pixel as a character, halftone or flat element based on the results of edge identifying unit (187) and the halftone dot detector (182) (column 5, lines 66-67 – column

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6,lines 1-8). The brightness calculation unit (181) calculates the brightness of each pixel which is calculated using a formula and is entered into the edge detector (183) and halftone dot detector (182) (column 4,lines 60-67 and column 5,lines 1-22), which reads on a halftone pixel determining means which determines whether each pixel is a halftone pixel or a non-halftone pixel, according to a predetermined algorithm based on the result obtained by said edge detecting means. Fujiwara teaches of a correction unit (15) that has a smoothing filter (151), pass-through circuit (152) and edge enhancing circuit (153), in which the data is corrected, based on the results of the total judgment unit (188) (column 5,lines 66-67 – column 6,lines 13-22). This reads on a redetermining means which corrects the result obtained from said halftone pixel determining means by changing a non-halftone pixel which is continuous to the halftone pixel determined by said halftone pixel determining means or a halftone pixel previously corrected by the redetermining means and has a density equal to or higher than a threshold density, to a halftone pixel.

Allowable Subject Matter

11. Claims 6,8,10,12,14 and 16 would be allowable if claims 6 and 8 are rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

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12. Claims 9,11,13 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if the 112 2nd rejection is overcome and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication should be directed to Michael Burleson whose telephone number is (571) 272-7460 and fax number is (571) 273-7460. The examiner can normally be reached Monday thru Friday from 8:00 a.m. – 4:30p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached at (571) 272-7471

Michael Burleson
Patent Examiner
Art Unit 2626

MB

Mlb
July 23, 2005

KA Williams
KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER